AMENDMENTS TO THE SPECIFICATION

Please amend the specification in above-identified patent application as follows. A marked up version of the amended pages has been appended hereto.

On page 8, line 11, please replace the underscores with --10/025,196--.

On page 8, line 12, please delete "attorney docket number 9793-102,".

On page 13, line 21, please replace the underscores with --10/025,196--.

On page 13, line 21, please delete "attorney docket number 9793-102,".

example by hydrolysis reactions, by treatment with a carboxylating reagent, or by formation of self-assembled monolayers (SAMs) containing carboxylate groups. See for example R.G. Chapman et al. *J. Am. Chem. Soc.*, 122, 8303-8304 (2000). Activated particles are then mixed with an antibody, optionally followed by exposure to BSA, to produce sensitized particles. These sensitized particles may be further treated with a primary amine compound to prevent covalent interactions between sample components and any residual NHS or sNHS esters on the particle surface. Suitable primary amines include, for example, glycine ethyl ester, 2-(aminoethoxy)ethanol (AEO); 2,2'-(ethylenedioxy)bisethylamine (EBE); or 4,7,10-trioxa-1,3-tridecanediamine (TTD) as described in co-pending application serial no. __/_____, attorney docket number 9793-102, entitled "Particles For Immunoassays And Methods For Treating The Same" filed December 18, 2001, with inventors C.C. Lawrence et al., the disclosure of which is incorporated herein by reference.

Analysis of the carbodiimide activation chemistry reveals that tertiary amine functional groups linked to the surface of the particles can be formed by conversion of the intermediate O-acylisourea intermediate to an N-acylurea moiety. During the conversion of the particle-bound carboxylate groups into NHS-esters or sNHS-esters, it is believed that the presence of excess EDC can lead to the formation of N-acylurea moieties on the particle surface as illustrated in the following reaction scheme. These N-acylurea moieties are likely stable during the subsequent processing steps (sensitization and treatment with primary amine) and under normal immunoassay conditions.

A comparison of tertiary amines as additives to particle agglutination immunoassays reveals that the tertiary amine compounds of the present invention provide for more accurate results than do other tertiary amines. Referring to Example 3 and Table A herein, which compare the parameters of best fit lines for a variety of tertiary amines in a gentamicin immunoassay, the best fit line for TEO has the most favorable combination of values, not only for the slope, but also for the intercept and the R value. Although other tertiary amines have one or two favorable values for the best fit parameters, TEO has favorable values for all three. For example, triethylamine has intercept and R values similar to those of TEO; however triethylamine has a slope value farther from 1.0 than does TEO.

These results demonstrate that an improved performance of a particle based immunoassay can be obtained by including a tertiary amine compound of the present invention in the assay mixture. The inclusion of a tertiary amine compound may be used alone or in combination with other techniques for reducing interference in an immunoassay. In optimizing the performance of particle agglutination immunoassays, it may be preferred to include a tertiary amine compound of the present invention in the assay mixture, and also to use sensitized particles which have been treated with a primary amine compound, as described in the above mentioned co-pending application serial no. __/_____, attorney docket number 9793-102, entitled "Particles For Immunoassays And Methods For Treating The Same" filed December 18, 2001, with inventors C.C. Lawrence et al. In some cases, the use of sensitized particles treated with a primary amine, such as glycine ethyl ester, AEO, EBE and TTD, may be sufficient to reduce the interference of the immunoassay to the desired level. The use of either the primary amine particle treatment or the tertiary amine compound additive, alone or in combination, can be determined empirically to determine if one technique is better than the other or if the combination yields the best results.

Without wishing to be bound by any theory, it is believed that failure to compete with the N-acylurea group in this fashion can instead result in the interaction of the N-acylurea with protein components of the biological fluid